BRUHATH BANGALORE MAHANAGARA PALIKE

Name of the Agency	:	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of the Work	:	Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Estimate Cost	:	Rs.

QUALITY CONTROL REPORTS TO

Asst. Executive Engineer,
Kodigehalli Sub Division,
BBMP, Bangalore.

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QUALITY CONTROL REPORTS FOR

WET MIX MACADAM (WMM)

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Job No.: CTCE/BBMP/W.No07/RSCN/WMM/Gradation/2014-15

02.06.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014

Date of Testing : 02.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **7985**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	145	145	1.8	98.2	95-100
22.4	2550	2695	33.8	66.2	60-80
11.2	1275	3970	49.7	50.3	40-60
4.75	1085	5055	63.3	36.7	25-40
2.36	995	6050	75.8	24.2	15-30
0.600	895	6945	87.0	13.0	8-22
0.075	680	7625	95.5	4.5	0-8

Note:

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02.06.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014

Date of Testing : 02.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8410**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	125	125	1.5	98.5	95-100
22.4	2650	2775	33.0	67.0	60-80
11.2	1310	4085	48.6	51.4	40-60
4.75	1205	5290	62.9	37.1	25-40
2.36	1085	6375	75.8	24.2	15-30
0.600	985	7360	87.5	12.5	8-22
0.075	850	8210	97.6	2.4	0-8

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GRADATION FOR WMM

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Reference : EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014

Date of Testing : 02.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8085**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	250	250	3.1	96.9	95-100
22.4	2145	2395	29.6	70.4	60-80
11.2	1285	3680	45.5	54.5	40-60
4.75	1205	4885	60.4	39.6	25-40
2.36	1080	5965	73.8	26.2	15-30
0.600	920	6885	85.2	14.8	8-22
0.075	850	7735	95.7	4.3	0-8

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GRADATION FOR WMM

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Reference : EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014

Date of Testing : 02.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8160**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	190	190	2.3	97.7	95-100
22.4	2545	2735	33.5	66.5	60-80
11.2	1210	3945	48.3	51.7	40-60
4.75	1050	4995	61.2	38.8	25-40
2.36	985	5980	73.3	26.7	15-30
0.600	960	6940	85.0	15.0	8-22
0.075	820	7760	95.1	4.9	0-8

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GRADATION FOR WMM

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Reference : EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014

Date of Testing : 02.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8340**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	195	195	2.3	97.7	95-100
22.4	2850	3045	36.5	63.5	60-80
11.2	1250	4295	51.5	48.5	40-60
4.75	1105	5400	64.7	35.3	25-40
2.36	985	6385	76.6	23.4	15-30
0.600	785	7170	86.0	14.0	8-22
0.075	820	7990	95.8	4.2	0-8

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GRADATION FOR WMM

MORTH TABLE-400-11

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Reference : EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014

Date of Testing : 02.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8370**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	110	110	1.3	98.7	95-100
22.4	2840	2950	35.2	64.8	60-80
11.2	1210	4160	49.7	50.3	40-60
4.75	1180	5340	63.8	36.2	25-40
2.36	1075	6415	76.6	23.4	15-30
0.600	980	7395	88.4	11.6	8-22
0.075	825	8220	98.2	1.8	0-8

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Job No.: CTCE/BBMP/W.No07/RSCN/WMM/AIV/2014-15

02.06.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	02.06.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	85	86	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	303	
4	Aggregate Impact value = percent fines	22.08	22.11	
	100* (W_2/W_1)%			22.09

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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02.06.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	02.06.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	390	391	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	89	90	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	301	
4	Aggregate Impact value = percent fines	22.82	23.02	
	100* (W_2/W_1)%			22.92

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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02.06.2014

Aggregate Impact Value

IS: 2386 Part IV

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Name of the Work	Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	02.06.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	390	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	88	89	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	301	
4	Aggregate Impact value = percent fines	22.62	22.82	
	100* (W_2/W_1)%			22.72

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Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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Job No.: CTCE/BBMP/W.No.07/MP/WMM/S-T/2014-15 02.06.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of Work	Improvements to Roads, Drains and Asphalting to roads in Venkategowda Layout Kempapura 1st A Main in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	02.06.2014

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Result : Flakiness Index = **11.56%**

Elongation Index = **13.25%**

Result : Combined Flakiness & Elongation index 24.81%

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

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DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
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Reference	EE/BTP/BBMP-E-PMT/503/2013-14 Dated: 24.02.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	02.06.2014

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Result : Flakiness Index = **12.32%**

Elongation Index = **13.25%**

Result : Combined Flakiness & Elongation index 25.57%

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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